FIG. 1

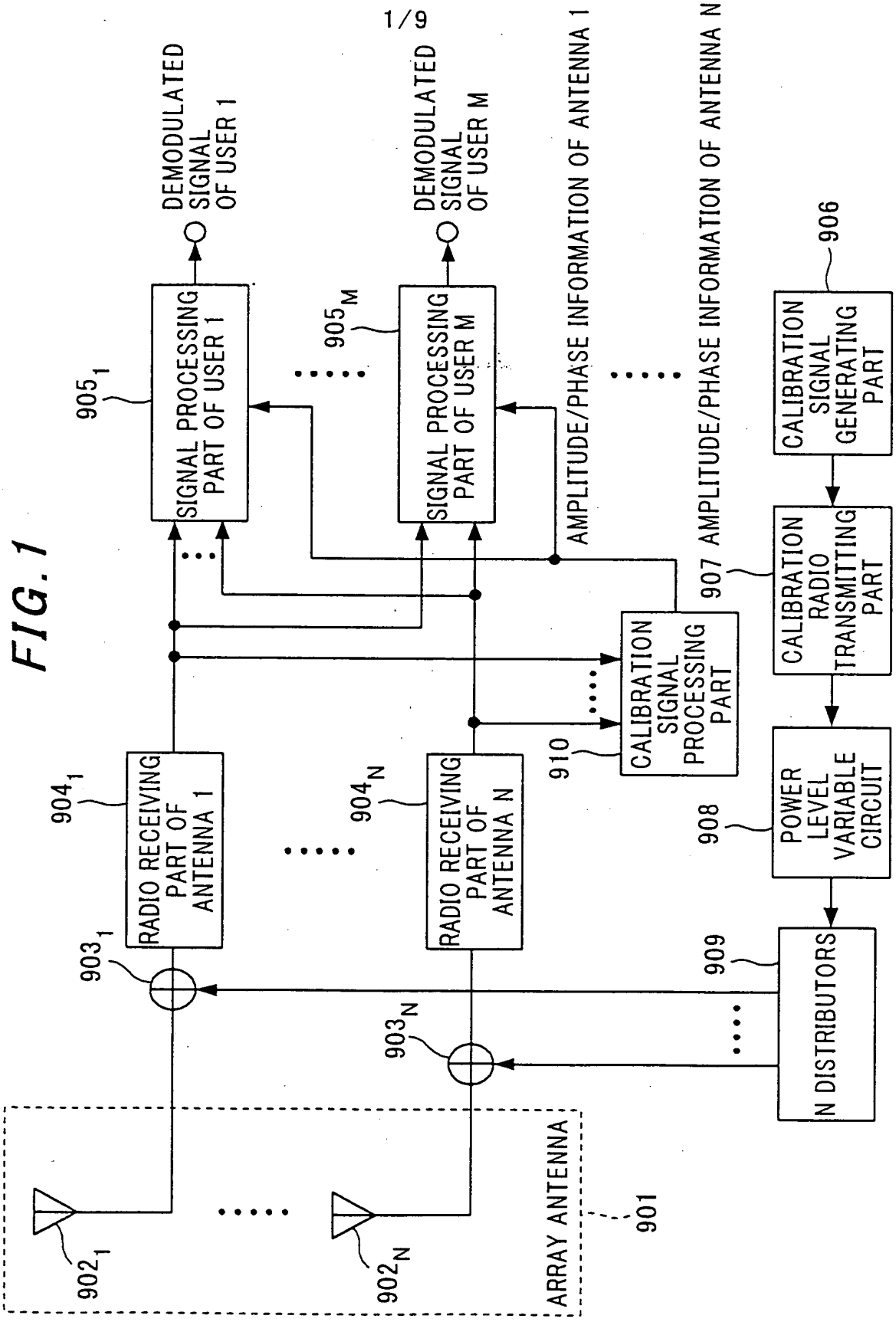

DEMODULATED SIGNAL OF USER 1
DEMODULATED SIGNAL OF USER M
SIGNAL PROCESSING PART OF USER 1
SIGNAL PROCESSING PART OF USER M
905 1
905 M
AMPLITUDE/PHASE INFORMATION OF ANTENNA 1
AMPLITUDE/PHASE INFORMATION OF ANTENNA N
907
906
CALIBRATION SIGNAL GENERATING PART
CALIBRATION RADIO TRANSMITTING PART
CALIBRATION SIGNAL PROCESSING PART
910
904 1
904 N
RADIO RECEIVING PART OF ANTENNA 1
RADIO RECEIVING PART OF ANTENNA N
908
POWER LEVEL VARIABLE CIRCUIT
903 1
903 N
909
N DISTRIBUTORS
902 1
902 N
ARRAY ANTENNA
901

FIG. 2

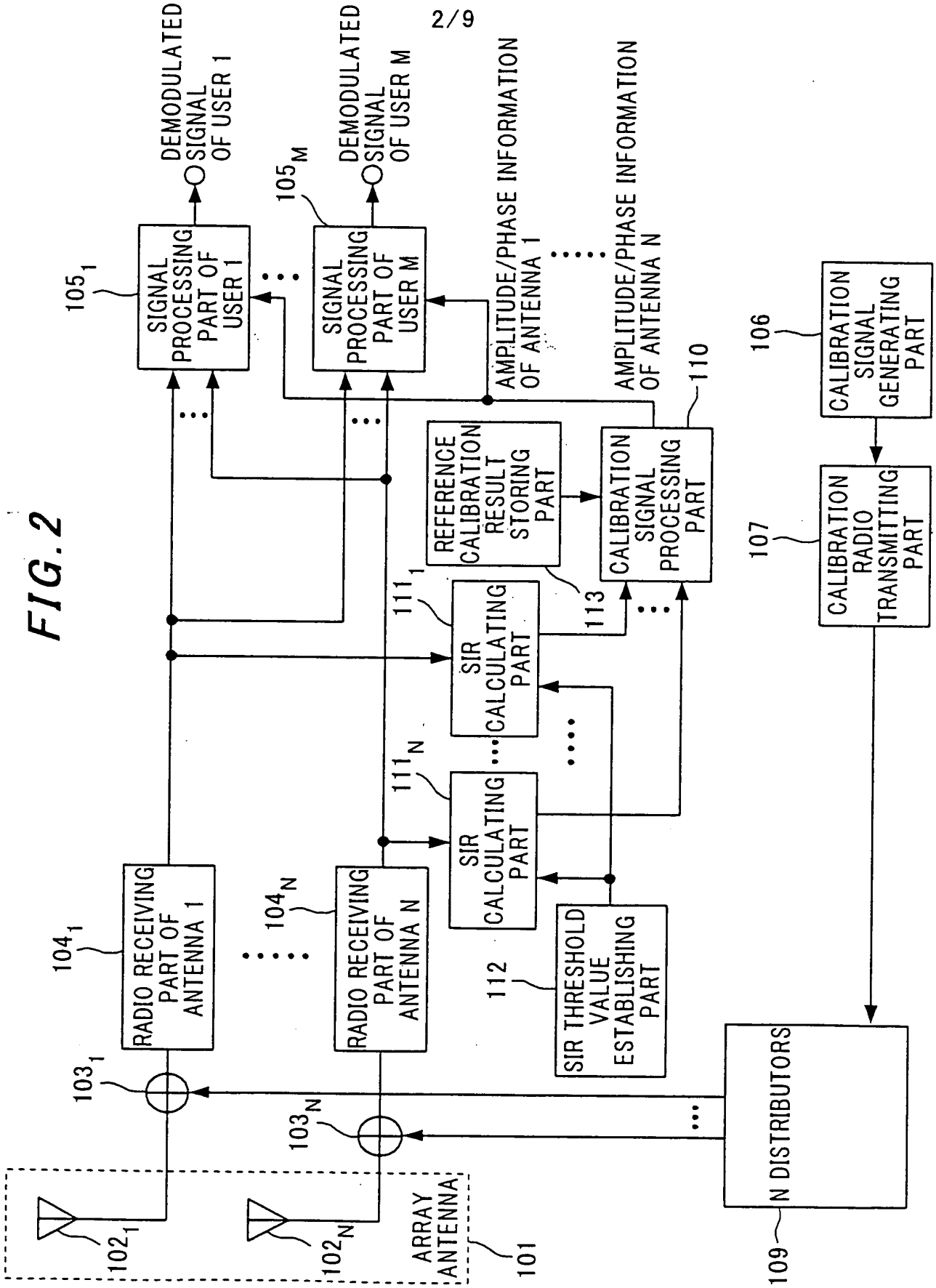
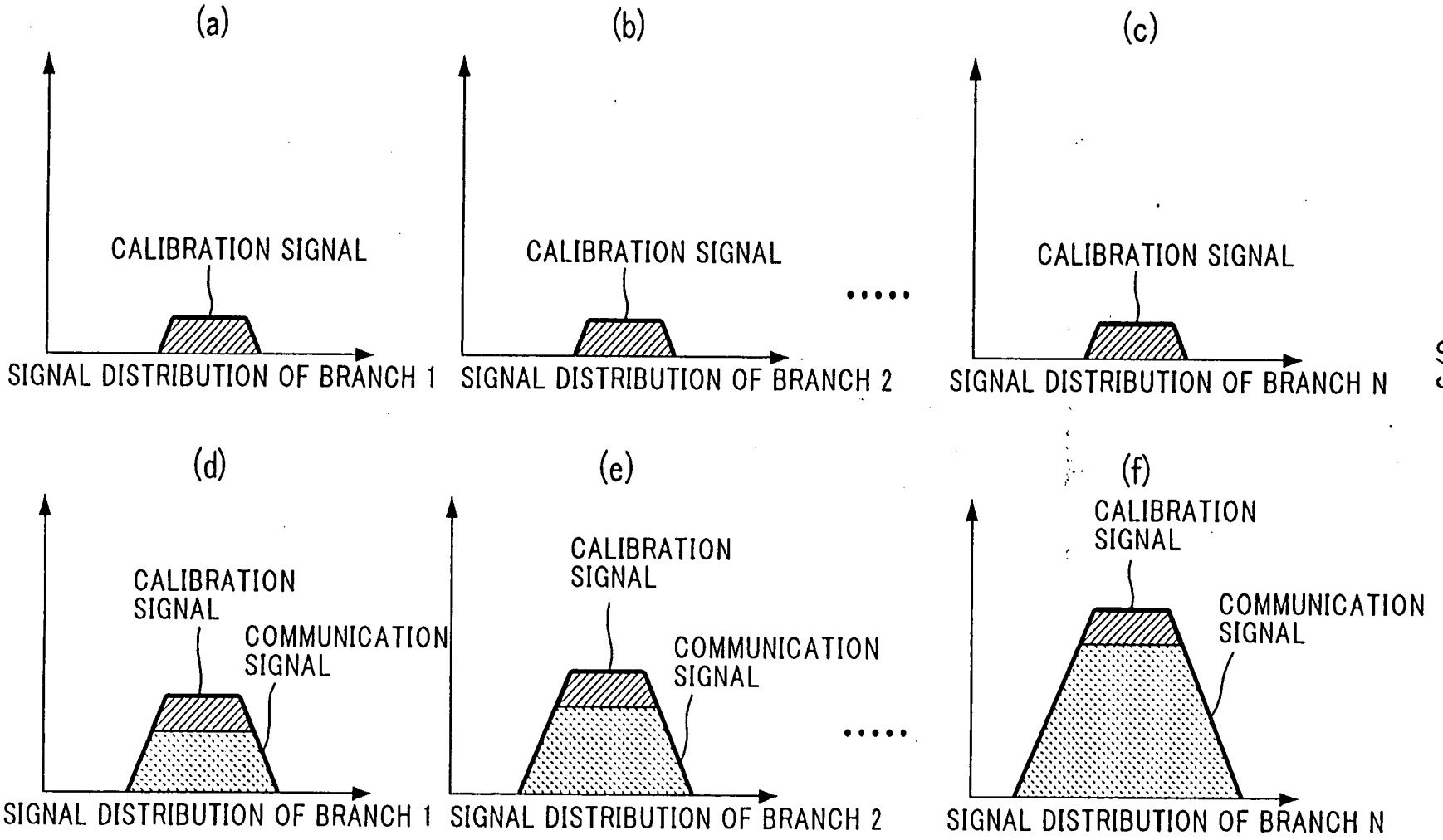

DEMODULATED SIGNAL OF USER 1
DEMODULATED SIGNAL OF USER M
105_1
105_M
SIGNAL PROCESSING PART OF USER 1
SIGNAL PROCESSING PART OF USER M
AMPLITUDE/PHASE INFORMATION OF ANTENNA 1
AMPLITUDE/PHASE INFORMATION OF ANTENNA N
110
106
CALIBRATION SIGNAL GENERATING PART
REFERENCE CALIBRATION RESULT STORING PART
CALIBRATION SIGNAL PROCESSING PART
107
CALIBRATION RADIO TRANSMITTING PART
111_1
SIR CALCULATING PART
113
111_N
SIR CALCULATING PART
104_1
RADIO RECEIVING PART OF ANTENNA 1
104_N
RADIO RECEIVING PART OF ANTENNA N
112
SIR THRESHOLD VALUE ESTABLISHING PART
103_1
103_N
N DISTRIBUTORS
109
102_1
102_N
ARRAY ANTENNA
101

FIG. 3



10/518564

FIG. 4

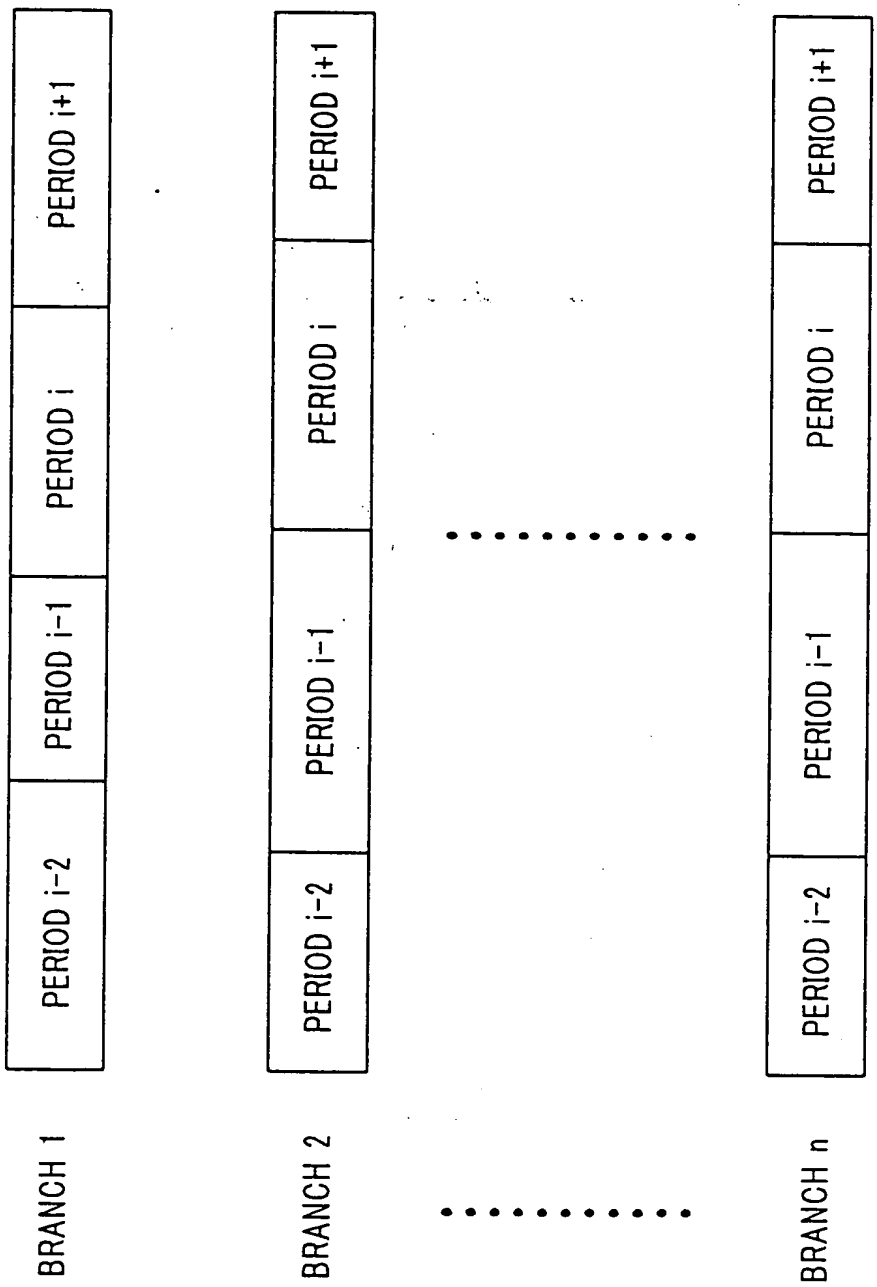

BRANCH 1
PERIOD i-2
PERIOD i-1
PERIOD i
PERIOD i+1
BRANCH 2
PERIOD i-2
PERIOD i-1
PERIOD i
PERIOD i+1
BRANCH n
PERIOD i-2
PERIOD i-1
PERIOD i
PERIOD i+1

FIG. 5

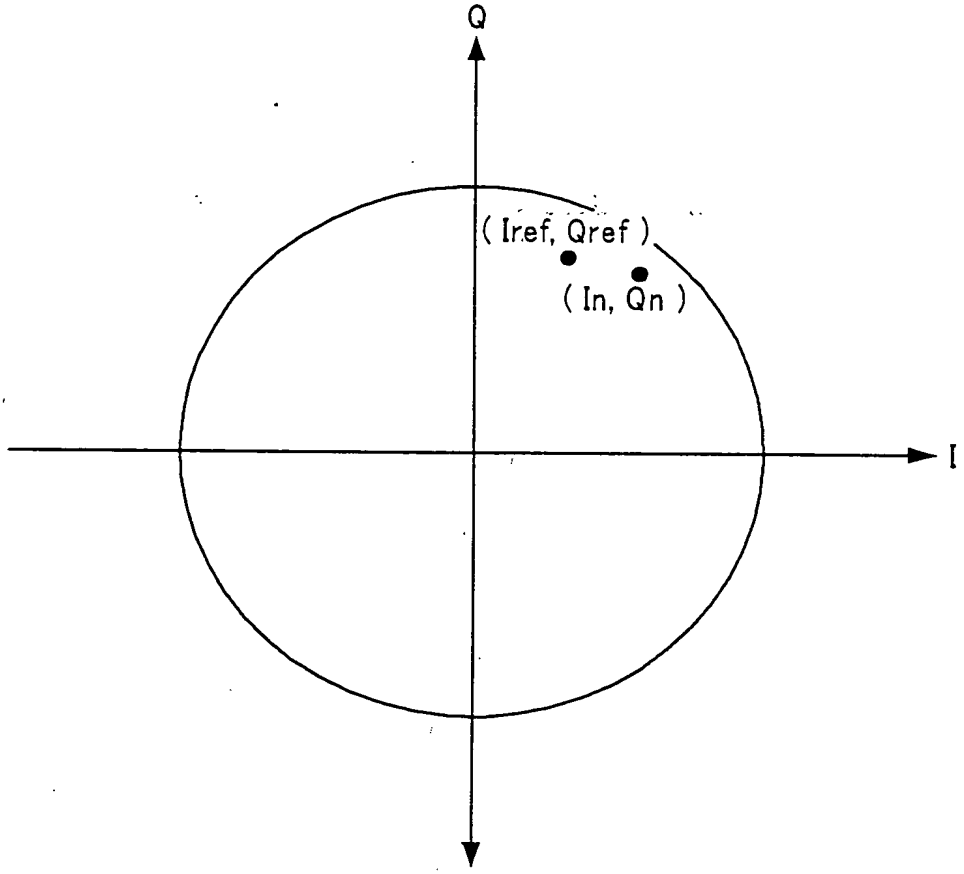


FIG. 6

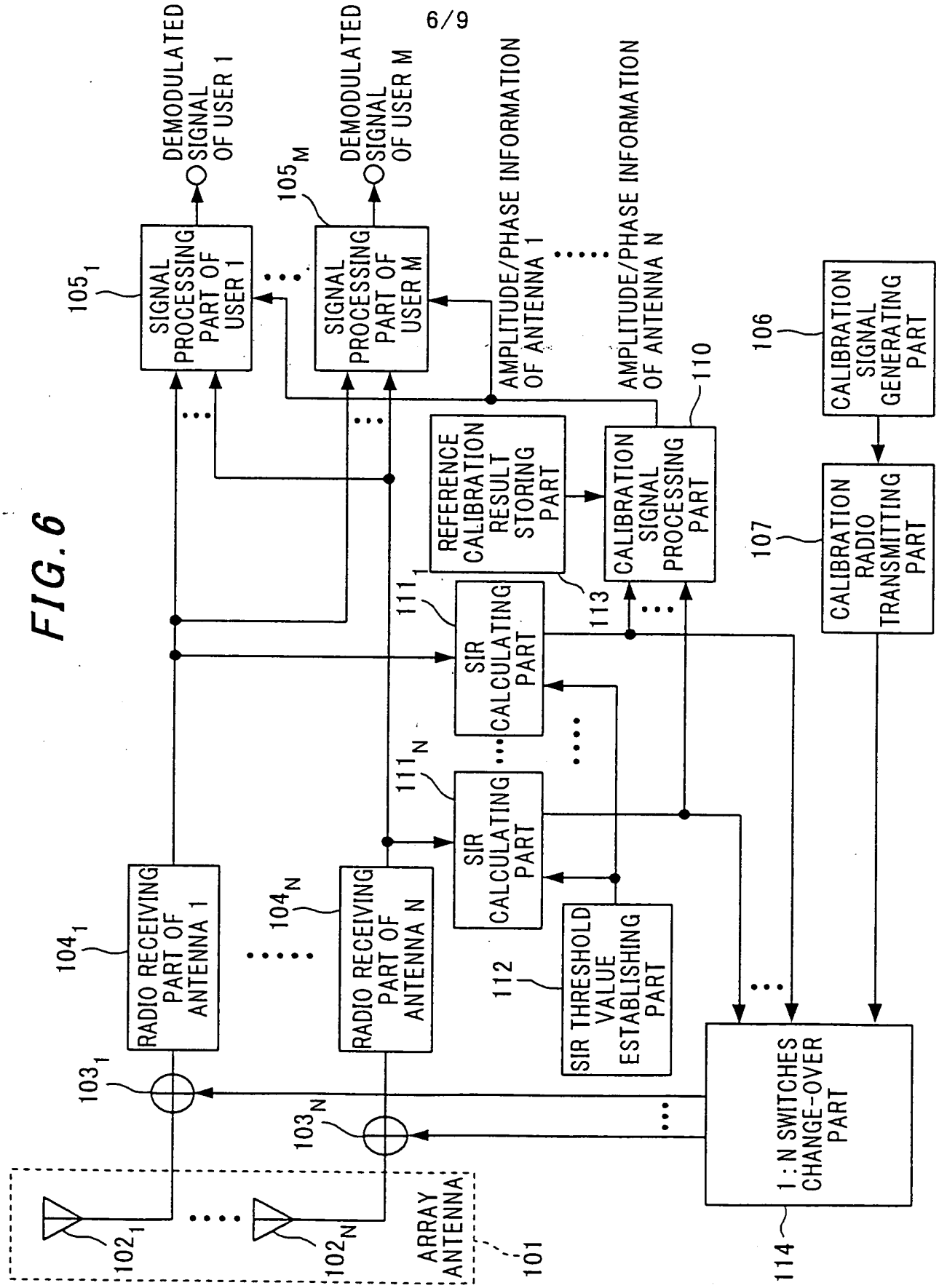

ARRAY ANTENNA
101
102_1
102_N
103_1
103_N
104_1
104_N
RADIO RECEIVING PART OF ANTENNA 1
RADIO RECEIVING PART OF ANTENNA N
105_1
105_M
SIGNAL PROCESSING PART OF USER 1
SIGNAL PROCESSING PART OF USER M
DEMODULATED SIGNAL OF USER 1
DEMODULATED SIGNAL OF USER M
111_1
111_N
SIR CALCULATING PART
SIR CALCULATING PART
112
SIR THRESHOLD VALUE ESTABLISHING PART
113
REFERENCE CALIBRATION RESULT STORING PART
110
CALIBRATION SIGNAL PROCESSING PART
AMPLITUDE/PHASE INFORMATION OF ANTENNA 1
AMPLITUDE/PHASE INFORMATION OF ANTENNA N
106
CALIBRATION SIGNAL GENERATING PART
107
CALIBRATION RADIO TRANSMITTING PART
114
1 : N SWITCHES CHANGE-OVER PART

FIG. 7

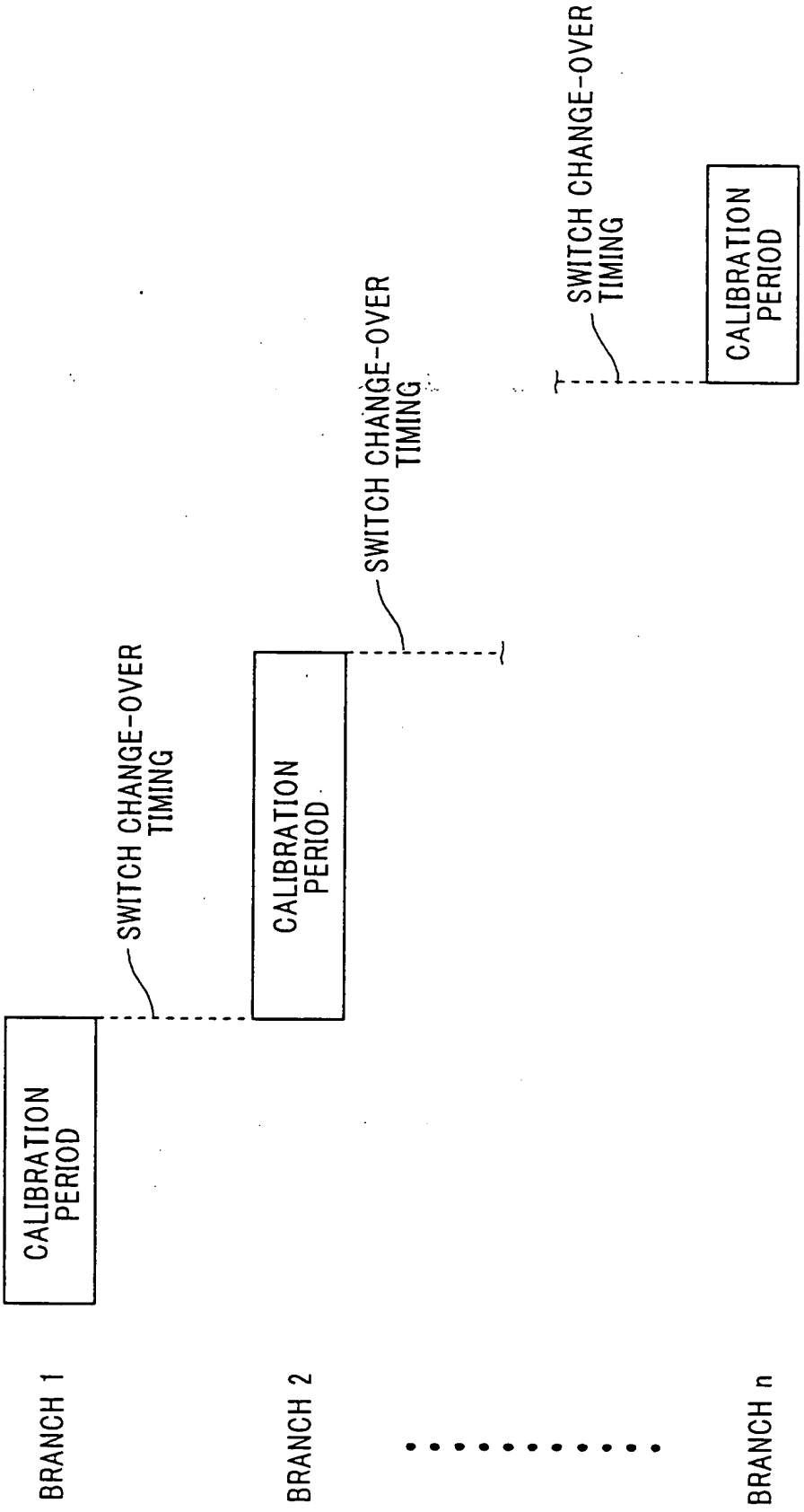

BRANCH 1
CALIBRATION PERIOD
SWITCH CHANGE-OVER TIMING
BRANCH 2
CALIBRATION PERIOD
SWITCH CHANGE-OVER TIMING
BRANCH n
CALIBRATION PERIOD
SWITCH CHANGE-OVER TIMING

FIG. 8

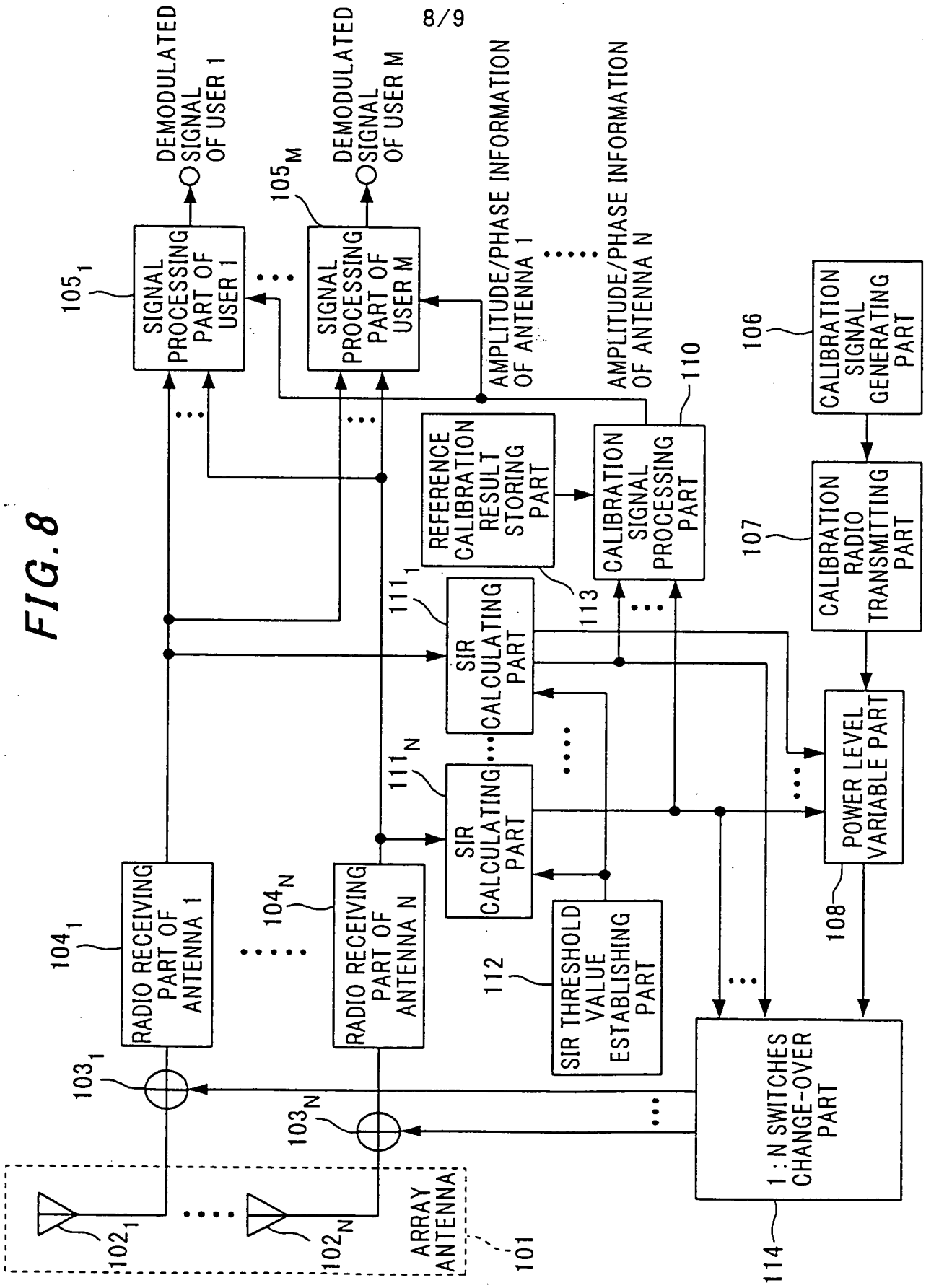
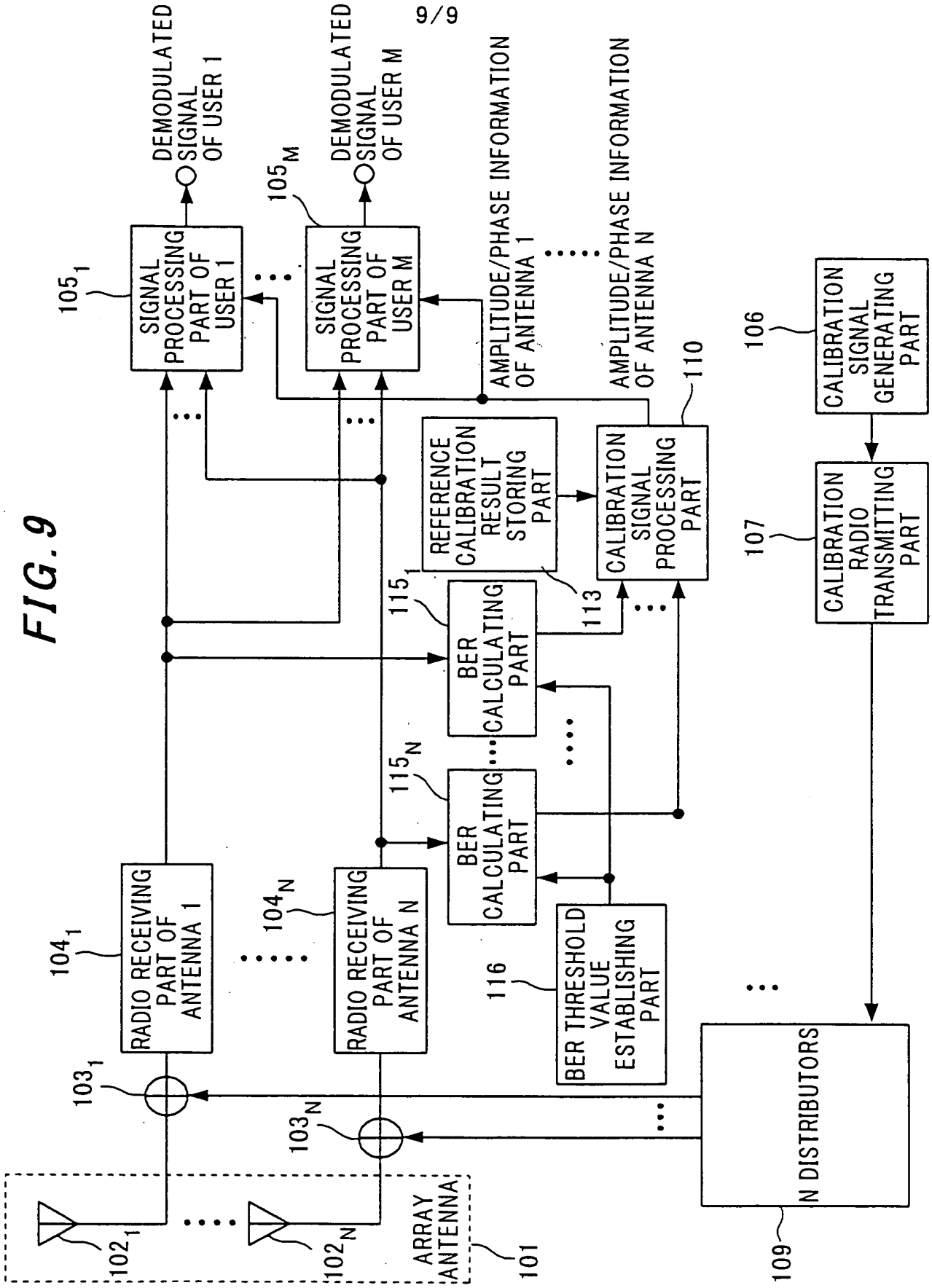

ARRAY ANTENNA
101
102_1
102_N
103_1
103_N
104_1
104_N
RADIO RECEIVING PART OF ANTENNA 1
RADIO RECEIVING PART OF ANTENNA N
105_1
105_M
SIGNAL PROCESSING PART OF USER 1
SIGNAL PROCESSING PART OF USER M
DEMODULATED SIGNAL OF USER 1
DEMODULATED SIGNAL OF USER M
111_1
111_N
SIR CALCULATING PART
SIR CALCULATING PART
112
SIR THRESHOLD VALUE ESTABLISHING PART
113
REFERENCE CALIBRATION RESULT STORING PART
110
CALIBRATION SIGNAL PROCESSING PART
AMPLITUDE/PHASE INFORMATION OF ANTENNA 1
AMPLITUDE/PHASE INFORMATION OF ANTENNA N
106
CALIBRATION SIGNAL GENERATING PART
107
CALIBRATION RADIO TRANSMITTING PART
108
POWER LEVEL VARIABLE PART
114
1 : N SWITCHES CHANGE-OVER PART

FIG. 9


ARRAY ANTENNA
101
102_1
102_N
103_1
103_N
104_1
RADIO RECEIVING PART OF ANTENNA 1
104_N
RADIO RECEIVING PART OF ANTENNA N
105_1
SIGNAL PROCESSING PART OF USER 1
105_M
SIGNAL PROCESSING PART OF USER M
DEMODULATED SIGNAL OF USER 1
DEMODULATED SIGNAL OF USER M
115_1
BER CALCULATING PART
115_N
BER CALCULATING PART
116
BER THRESHOLD VALUE ESTABLISHING PART
AMPLITUDE/PHASE INFORMATION OF ANTENNA 1
AMPLITUDE/PHASE INFORMATION OF ANTENNA N
REFERENCE CALIBRATION RESULT STORING PART
113
110
CALIBRATION SIGNAL PROCESSING PART
106
CALIBRATION SIGNAL GENERATING PART
107
CALIBRATION RADIO TRANSMITTING PART
N DISTRIBUTORS
109